

Office Action Summary

Application No.

09/410,100

Applicant(s)

TERASHIMA ET AL.

Examiner

Heather D Gibbs

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 October 1999.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 October 1999 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All. b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the actuating member, lock mechanism, and side plate (plate-like member) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.
2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "461" and "481" have both been used to designate CIS.
3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description:
11,12,13,14,14a, 14b, 16a, 16b, 17a, 17b, 18,19,21b, 24,37a, 51,52,110,110a,
113,114,115,116,118,121,122,123,124,125,126,127,128,131,137,138,139,144b,
145,147,148,149,150,151,152,153,157,156,158,161b, 162b, 164,166,191,220a,
221,351,353,361,363,428,472,519,534,1104a, 3101,3102,3103,3104a, 3104b,
3106a, 3106b, 3107a, 3107b, 3155,3157,3158,9907. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: 167,193(Fig 5), 179,180 (Fig 8)235 (Fig 10), 223(Fig 11) 230a(Fig 13), 228 (Fig 14), 34,38,355,380,381,382,390 (Fig 15), 314(Fig 16), 382a (Fig 17), 368 (Fig 18), 900 (Fig 20), 415,423 (Fig 21), 456,463,464,491(Fig 22), 473 (Fig 25), 56,59,523 (Fig 29), 517b, 518b, 531b, 539b, 543(Fig. 30), 519a, 519b(Fig 31), 551,552 (Fig 33), 1110 (Fig 35), 3159,3160 (Fig 40), 9905 (Fig 41).
4. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the

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Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 4-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Sato et al (US 5,452,098).

Considering claim 1, Sato et al. discloses an image reading device that comprises stacking means for stacking a document (Col 12. Lines 42-47); reading means (Ref 104) for reading an image of the document (Col 6 Lines 66-58); separating means (Ref 223) for separating the document stacked on said stacking means sheet by sheet (Col 12 Lines 47-50); conveying means (Ref 208) for conveying the document separated by said separating means to said reading means (Col 12 Lines 54-65) and; discharging means (Ref 14a & 14b) for discharging the document to the outside of the device (Col 2 Lines 18-20) wherein; a device body is divided into an upper unit (Ref 201) and a lower unit (Ref 202), said upper unit is constituted to be openable/closeable to said lower unit (Col 12 Lines 27-30), and said separating means (Ref 224) is disposed in either one of said upper unit and said lower unit (Col 12 Lines 65-68).

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Considering claim 4, Sato et al. discloses an image reading system wherein said separating means comprises a separating roller and a plate-like separating member (Fig 2 References 223 and 224 and Col 12 47-49).

Referring to claim 5, Sato et al. discloses an image reading device that comprises an upper guide member and a lower guide member which form a document conveying path, wherein said upper unit includes the upper guide member, and said lower unit includes the lower guide member (Col 14 Lines 1-6 and Fig 19 References 318b and 318bb).

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

8. Claims 8-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Hasegawa (US 6,342,956 B1).

Considering claim 8, Hasegawa discloses an image reading device that comprises an operating unit openable/closeable to a device body and having a guide member for guiding and conveying a document (Col 30 Lines 22-26 and Fig 27); a reading unit (ref 200) having

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reading means disposed opposite to said guide member for reading an image of the document, and being attachable to/detachable from said device body (Col 31 Lines 19-22); detecting means (ref 403) for detecting opening/closing of said operating unit (Col 30 Lines 19-26) wherein; said detecting means comprises a sensor disposed in said operating unit, and an actuating member moveable disposed in said operating unit and operated by said reading unit to turn on/off sensor (Col 33 Lines 22-29).

Considering claim 9, Hasegawa discloses an operating unit that has an operating panel with a plurality of operating keys (Fig 27 Ref. 402 and 403).

9. Claims 16-17, 19-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Sasai (US 5,637,070).

Referring to claims 16 and 19, Sasai discloses a curl-correcting device that can be used in office equipment such as a facsimile apparatus and printers. (Col 1 Lines 20-22). Sasai teaches of the device having a recording section having recording means for recording an image on a sheet in accordance with image information [and a rolled sheet storage section for accommodating a rolled sheet to feed the sheet (Col 25 Lines 35-36)] (Fig 33 Ref. 88 and Col 2 Lines 28-36); a reading section (unit C) having reading means for reading a document and separation means for separating the document sheet by sheet to feed the document to said reading means (Col 5 Lines 11-27); a device body to where the recording section (Unit B) and the reading section (Unit C) are attached (Fig 2 and Col 4 Lines 59-61); wherein said separating means of said reading section is disposed above said recording means, and said separating section can open by rotating from a front side toward a rear side of said device body centering on a rotating shaft disposed on the rear side of said device body (Fig 2 Reference C, B, and Fig 24 Ref. 3).

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With reference to claims 17 and 20, Sasai discloses separating means that has a guide member for guiding the document, and the guide member can rotate with said separating means centering on said rotating shaft (Col 5 Lines 47-51 and Fig 1).

10. Claims 22 and 27 are rejected under 35 U.S.C. 102(e) as being anticipated by Kotani et al (US 4,962,526).

Regarding claim 22, Kotani et al. discloses a document/image data reader that has a conveying path for conveying a document (Fig 1 Ref 22); a document reading section which is attachable to /detachable from the device body for reading the conveyed document by manual operation when detached from said device body, and which can be mounted to said device body from above, and (Fig 3); a reading cover section openably/closeably mounted to said device body on a top surface of the document reading section, for holding said document reading section in said device body when closing the device body (Fig 5 Ref 7); and positioning means for positioning the document in a predetermined position when said document reading section is mounted to said device body (Col 7 Lines 36-49), wherein the positioning means comprises a plurality of first regulating members which can regulate positions of said document reading section in a document conveying direction and in a direction intersecting the document conveying directing and which are disposed in either one of said device body and said reading cover section; and a second regulating member for positioning said document reading section in a vertical direction (Col 7 Lines 36-49).

Referring to claim 27, Kotani et al discloses an operation key for operating the reading device body (Fig 1 Ref 8)

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al. (US 5,452,098) as applied to claim 1 above, and further in view of Hiroi et al. (US 5,812,912).

Sato et al. discloses the device as discussed above in claim 1, but fails to particularly teach a drive source for driving said separating means and said conveying means, the drive source being disposed in the unit different from the unit in which said separating means is disposed. Hiroi et al. shows an original supplying apparatus where the separating means (Fig 2 Ref. 41) is in one section of the unit and the drive means (Fig 2 Ref 17) is in another section of the unit. Therefore, it would have been obvious to a person skilled in the art at the time the invention was made to include Hiroi's apparatus in Sato's system. Sato's system would easily be modified to include Hiroi's drive source as a way to move the separating and conveying means, as taught by Hiroi et al.

Regarding claim 3, Sato in view of Hiroi disclose the device as discussed above in claim 2, in addition Sato et al shows where the conveying means is disposed in the same unit as the drive source (Fig 23 Ref. 407,408, and 403,436). Therefore, it would have been obvious to a person skilled in the art at the time the invention was made to further include Sato's conveying design in the conveying means of Sato and Hiroi. Sato's system would

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easily be modified in order to put the conveying means in the same unit as the drive unit and within an image-reading device and as a design choice to conserve space in the unit, as taught by Sato.

13. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al. (US 5,452,098) as applied to claim 1 above, and further in view of Ara et al (US 5,889,597).

Sato et al discloses the device as discussed above in claim 1, but does not disclose reading means that comprises a scanner which is disposed in said lower unit and which is attachable to/detachable from the image reading device body. Ara et al. discloses a printer serving as an image information processing apparatus in accordance with a scanner serving as reading means mounted therein in a state in which these two are separated from each other (Col 3 Lines 62-67 and Fig 1). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include Sato et al.'s image reading system with Ara's attachable to/detachable from scanner which can be hand held in an image reading device. Sato's device would easily be modified as a design option for the reading means.

14. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al (US 5,452,098) in view of Ara (US 5,889,597) as applied to claim 6 above, and further in view of Shimura et al. (US 4,652,937).

Sato discloses the device as discussed above in claim 1 and further in view with Ara as applied to claim 6, however Ara does not disclose discharging means that comprises a drive roller and follower roller, wherein said driver roller is disposed in the upper unit, and said follower unit is disposed in the hand scanner. Shimura et al. discloses a driver roller being in a first case, which is with the hand held scanner and the follower roller being

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disposed in a second case. Shimura et al. teaches that the follower rollers can be in the hand held scanner, just as long as it is in a different unit from the driver rollers. (Col 4 Lines 25-42). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to include Shimura's drive roller in the system of Sato in view of Ara. Sato and Ara's system would easily be modified to include Shimura's drive roller in one unit as a way to make the device compact.

15. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hasegawa et al. (US 6,342,956) as applied to claim 8 above, and further in view of Honma et al (US 4, 847,654).

Hasegawa et al. disclose the device as described above in claim 8 fails to particularly teach wherein said sensor comprises a photointerruptor. Honma et al discloses an image forming apparatus under an original scanning unit that comprises of a photointerruptor (Ref 22 Col 4 Lines 4-9). Therefore, at the time the invention was made it would have been obvious to one skilled in the art to include Honma's photointerruptor in the sensor of Hasegawa. Hasegawa's sensor would easily be modified to include Honma's photointerruptor as a way of detecting position in combination with the actuator, as taught by Honma.

16. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hasegawa et al. (US 6,342,956) as applied to claim 8 above, and further in view of Sato et al (US 5,452,098).

Hasegawa et al. discloses the device as discussed above in claim 8, but fails to particularly teach wherein said reading means comprises an adhesion type image sensor. Sato et al. discloses a facsimile apparatus that includes a linear image sensor where the

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linear image sensor is a contact type image sensor (Col 4 Lines 52-56). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to replace Sato's adhesion sensor with the sensor of Hasegawa. Hasegawa's sensor would easily be modified to be an adhesion type sensor since a contact type (adhesion) image sensor reads image information carried by the original, as taught by Sato.

17. Claims 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hasegawa et al (US 6,342,956) in view of Aihara et al (US 6,011,634).

Regarding claim 12, Hasegawa et al discloses the device as discussed above in claim 8, but does not disclose informing means for providing information when and operating unit is opened. Aihara et al. discloses portable facsimile equipment that is capable of detecting an open or closed state of the lid (Col 3 Lines 44-45). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to include Aihara's open/close lid in the device of Hasegawa. Hasegawa's device would easily be modified to include Aihara's open/close lid for informing the user of the current status of the lid and/or to inform the user of any problems before transmission begins, as taught by Aihara.

With reference to claim 13, Hasegawa et al. does not disclose informing means where the display means is in an operating unit. Aihara et al. discloses display means enclosed within the portable facsimile apparatus (Col 3 Lines 30-55). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to include Aihara's display means in Hasegawa's operation unit. Hasegawa's unit would easily be modified to include Aihara's display means as a way for the user to see any data before it is transmitted.

Referring to claim 14, Hasegawa et al. does not disclose informing means including a speaker disposed in the image reading device body. Aihara et al. discloses a communication

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module within the portable facsimile equipment that includes a loudspeaker (Col 15 Lines 50-54). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to include Aihara's loudspeaker in Hasegawa's device. Hasegawa's device would easily be modified to include Aihara's loudspeaker as a way to output a signal through a loudspeaker and inform the user of the presence of the received signal.

Considering claim 15, Hasegawa in view of Aihara discloses an image reading device as discussed above. However, Aihara further discloses a portable facsimile equipment that further comprising recording means 90 for recording the image on a sheet (Col 16 Lines 52-59), wherein said informing means comprises said recording means (Col 1 Lines 64-66). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to further incorporate Aihara's informing means with the image reading device already discussed with reference to Hasegawa in view of Aihara. Hence, Hasegawa and Aihara's invention would easily be modified to further include the informing/recording means of Aihara's for printing the received data on paper or the like and reading out the data, as taught by Aihara.

18. Claims 18 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sasai et al (US 5,637,070) as applied to claims 17 and 20 above respectively, and further in view of Haneda (US 5,966,569).

Sasai et al. does not disclose an image reading device where the separating means is closed and said guide member cover a part of said recording means to form a document-conveying path. Haneda discloses an image forming apparatus where there is an image forming body that is capable of opening and closing. The above-mentioned body opens along a recording sheet P conveyance path formed by the image forming body and a transfer

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means moves (guide member 153) to be away from the conveyance path when the image forming apparatus is opened. Hence, there is a conveyance path formed when the image forming body is closed. (Col 11 Lines 61-65 and Col 12 Lines 47-63). Therefore, it would be obvious to one skilled in the art at the time the invention was made to include Haneda's separating means in Sasai's system. Sasai's system would easily be modified to include Haneda's separating means as a way of avoiding damage to the apparatus and the operator's hands (when the separating means is in a closed position), as taught by Haneda.

19. Claims 23 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kotani et al (US 4,962,526) as applied to claim 22 above respectively, and further in view of Horaguchi (US 6,078,408).

Regarding claim 23, Kotani et al discloses the device as discussed above in claim 22, but does not disclose wherein said first regulating members have notch portions formed in corner positions of said document reading section and a plurality of positioning ribs which abut on both wall faces of the notch portions and can determine the positions and which are disposed in said device body. Horaguchi teaches of an image reading device-having notches for holding a mirror onto a mirror-holding frame, and having positioning ribs (Fig 2 Ref. 2a and 2b). Considering claim 26, said positioning rib have inclined faces in two directions so as to guide the notch portions of said document reading section. (Fig 2). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to include Horaguchi's positioning ribs in Kotani's system. Kotani's systems would easily be modified to include Horaguchi's positioning ribs as a way to guide the notch portions of said document reading section and for determining the vertical position of the document being fed.

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20. Claims 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kotani et al (US 4,962,526) and further in view of Hayashi et al (US 6,108,106).

Regarding claim 24, Kotani et al. discloses the device as discussed above in claim 22, but does not disclose an image reading device wherein first regulating members have positioning holes disposed in said document reading section and a plurality of positioning bosses which can be engaged with the positioning holes and which are disposed in said reading cover section. Hayashi et al. discloses a document/image data reader that has notch portions in the corner portions that determine position of document being disposed in the device body (Col 6 Lines 25-47 and Figs 4 and 17), the reader has a boss portion and a boss receiving portion (Fig 14 and Col 12 Lines 18-39) disposed in reading cover section. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to include Hayashi's regulating members in Kotani's device. Kotani's device would easily be modified to include the regulating members of Hayashi to determine the positions, which are disposed in the device, and to so the apparatus can be attached securely.

Regarding claim 25, Kotani further does not disclose wherein said second regulating member is disposed in said reading cover section, and has a conveying roller pressed by spring means so that said document reading section is pressed into contact with said device body, and a lock mechanism for locking said reading cover section to said device body. Hayashi discloses that within the reading portion there lies a conveying roller with a spring (Fig 3 Ref. 38a, Fig 5 Ref 64). A female connector 37 and male connector 21 interlock (Col 5 Lines 59-65). Therefore, at the time the invention was made it would have been obvious to one skilled in the art to combine Hayashi's conveying roller and connectors with the image-processing device of Kotani. Kotani's device would easily be modified to include Hayashi's

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conveying roller and lock mechanism so that the document reading section makes direct contact with the image-processing device and for locking the reading cover section to the device body.

Conclusion

23. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Heather D. Gibbs whose telephone number is 703-306-4152. The examiner can normally be reached on M-F 8AM-4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L. Coles can be reached on 703-305-4712. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-0377.

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Heather D Gibbs

Examiner

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EDWARD COLES

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